

THE
BOSTON MEDICAL AND SURGICAL
JOURNAL.

VOL. XVII.]

WEDNESDAY, SEPTEMBER 20, 1837.

[NO. 7.]

LIGATURE OF THE ARTERIA INNOMINATA.

[THE London Lancet, for June 17 and July 15, contains an interesting account of a case of aneurism of the subclavian artery treated by ligature of the arteria innominata. This dangerous operation, which was unsuccessful, was performed by Mr. Lizars, at the Edinburgh Royal Infirmary. The following is an abridged account of it, with the post-mortem appearances.]

Alexander Duncan, aged 30, a carter, admitted May 28, 1837. Fifteen months ago he met with a fall, and again another fall, on the elbow, eleven months since, which led, six weeks ago, to the appearance of a small pulsating tumor, above the clavicle, indicating aneurism of the subclavian artery, for which Mr. Lizars determined on tying the arteria innominata. The operator having arrived at the innominata, an aneurism needle was carried round it, from the right side, upwards, towards the trachea; the ligature was seized, and the artery tied. The hæmorrhage during the proceeding amounted to about two ounces.

The patient was examined about two hours after the operation, and did not present any unfavorable symptoms, excepting some pain in the course of the carotid and brachial arteries, and at about the elbow joint, which, towards evening, were attended by pain, on inspiration, in the right side of the chest. The pulse was full, and varied from 74 to 78. The pulsation in the tumor was completely suspended by the ligature of the innominata.

June 1. On the day after the operation the patient felt somewhat easy. The head is free, and a sense of suffocation, which has tormented him during the night, has gone off. He slept in the morning for a couple of hours, and passed the rest of the day without accident. The wound looked well.

3. The pulsation returned in the tumor, and a small quantity of blood distilled from the wound. The face seemed flushed, and the patient complained of the heat of the weather.

4. The pulsation in the tumor (which feels quite hard) has disappeared. He has passed three copious evacuations, and is free from uneasiness. Pulse 110, soft.

6. Patient progressing favorably. No accident has occurred.

June 8, nine days from the operation. Passed a good night, and feels quite easy; bowels regular; tongue moist, and almost clean; pulse 96,

and soft; skin cool and moist; passed about two pounds of urine last night, and the same quantity was drawn off this morning.

9. Slept well all night, and has no particular complaint. The wound looks well, and has nearly healed; it is discharging thick, healthy pus. Tongue still furred, but moist; pulse 96; skin cool; appetite good. Took a little chicken soup with relish. Does not complain of thirst.

10. Slept well, and feels quite easy this morning. Still requires to have his urine drawn off in the morning. Pulse 92, soft; tongue very nearly clean; skin cool, appetite good.

11. Passed a good night, and is in all respects the same as yesterday. Two pounds and a half of urine drawn off.

12. Did not sleep so well as usual; perspiring a great deal. Complains of slight nausea. Tongue furred; pulse 100. Has had two stools since yesterday.

13. Passed rather a restless night. Complains much of thirst. Pulse 100; tongue furred, and rather dry; skin cool and moist; bowels regular; still complains of nausea; three pounds of urine were drawn off. Habeat q. pr. calomel, 3 grains.

Vespère.—The calomel has operated three times. Vomited a good deal of bilious-looking stuff. Nausea gone; pulse 110. Feels more comfortable than he did in the morning.

14. Passed a good night, and has no particular complaint. Tongue much cleaner; skin cool and moist; very little thirst; bowels regular; appetite good. Passed two pounds of urine.

15. Passed a good night. Feels better than he has done for the last two days. Pulse 96, and soft; tongue almost clean. Takes beef-tea with relish; has had some weak bitter table-beer. The wound has healed, with the exception of a small sinus, which is discharging healthy pus in a moderate quantity, and which, it is presumptive, communicates with the ligature. Bowels regular; skin cool and moist.

16. Urine still requires to be drawn off every morning. Three pounds of urine were drawn off to-day. In all respects the same as yesterday.

Vespère, 7, P. M. On dressing the wound the knot of the ligature was found amongst the pus. (At the operation both ends of the ligature were cut away.)

June 17. 11, A. M. Passed rather a restless night, and at present complains of slight pain in the right side, and difficulty of breathing, which is much increased on taking a full inspiration; face flushed; pulse 120, full; skin hot and dry; tongue slightly loaded and dry; countenance anxious; great thirst; during the morning has been troubled with nausea and diarrhoea; urine passed naturally this morning. Apply fifteen leeches to the painful part. Three grains of calomel, one grain tartr. of antimony in an ounce of water. A table-spoonful every hour.

1, P. M. Leeches bled freely, with considerable relief; sinapism to the side.

4, P. M. Pain of side and difficulty of breathing gone; feels much easier in every respect; diarrhoea nearly ceased.

10, P. M. Feels quite easy at present; pulse 120, but soft; diarrhoea

gone; skin cooler, and more moist; countenance not so anxious; still complains of thirst.

June 18. 11, A. M. Passed a quiet night, and slept well; feels quite easy about the chest and side; face less flushed; pulse 116, soft; skin moist; a good deal of thirst and nausea; diarrhoea returned; urine naturally evacuated. Toast and tea for breakfast, with relish. Efferv. powder every hour.

6, P. M. Diarrhoea still troublesome; nausea subsided; pulse 112, soft; skin cool and moist. Anodyne lavement with 50 drops of laudanum. Omit the tartr. of antimony.

9, P. M. No motion since last report; feels quite easy; skin dry; pulse 116. Powder of ipecac. with opium, 12 grains; extract of opium, 1 grain.

June 19. 7, A. M. Has slept well all night; no return of diarrhoea; awoke this morning at seven with a severe fit of dry coughing, which caused hæmorrhage to take place from the wound. It was easily commanded with the finger, until a narrow strip of lint was stuffed into the wound, and a compress placed above it. About eight ounces of blood were lost. Pulse 110, fluttering; countenance anxious; skin dry.

12 o'clock. No return of hæmorrhage; tongue furred; pulse 120, strong and irregular. Bloodletting to 20 ounces at once. R. Extract of belladonna, one-sixth of a grain; aromatic powder, q. s.; one pill every two hours.

4, P. M. No more hæmorrhage; pulse reduced in strength, but not in quickness; blood drawn, much cupped and buffed; countenance still anxious; bowels once opened; cough harassing. R. Extract of belladonna, one-third of a grain; aromatic powder, q. s.; a pill every two hours. R. Tincture of digitalis, 10 drops; tincture of hyoscyamus, 20 drops; to be taken in a cup of water every second hour.

10, P. M. Slight oozing of blood, which was easily stopped by a little pressure for a few minutes; skin hot and dry. Dover's powder, 10 grains; opium, 1 grain. To be taken at once.

June 20. Noon. Passed a restless night; no return of hæmorrhage; passed his urine voluntarily; bowels open. Took tea and toast for breakfast. Pulse 120, soft. Continue the medicines. Belladonna plaster to the sternum.

6, P. M. Hæmorrhage commenced at 5 o'clock, P. M., which was easily commanded by pressure upon the wound, and entirely stopped by the introduction of lint. The quantity of blood lost did not exceed four ounces. Pulse 96, soft; skin cool, but dry. Dover's powder, 12 grains; opium, gr. jss. at once.

June 21. 2, A. M. Has taken some tea and toast; slept from 10, P. M., until half past 12; feels perfectly easy; skin cool and moist; pulse 106, soft; hæmorrhage again took place at a quarter past one, A. M.; the external bleeding ceased on inserting an additional piece of lint. The quantity of blood lost at this time would be between two and three ounces, but it was evident that there was *internal hæmorrhage*, from the tumefaction of the neck, and occasional spitting of mouthfuls of blood, accompanied with frequent cough, and considerable dyspnoea.

The dyspnœa gradually increased until half past one, A. M., when death closed the scene, on the twenty-first day after the operation.

Inspectio cadaveris. This had to be done privately and hurriedly, which must account for the brevity of the description. The wound of the neck was extended in every direction, and the thoracic cavity opened, when there appeared about twenty ounces of coagulated blood at the root of the neck and upper part of the right bag of the pleura, the apex of the right lung being pressed down in its cavity by the blood, for there were on this side adhesions throughout the pleura-pulmonalis with the pleura-costalis, of recent formation. The lungs of this side were apoplectic and softened. There were old adhesions on the left side, but the lungs were healthy.

The heart and arteries were healthy, with the exception of the tied point of the arteria innominata, and the aneurismal tumor of the right subclavian. The point of deligation shows the arteria anonyma separated a little in consequence of the bleeding, and there is some coagulated blood extending a very short way into the aortic portion of the innominata, and upwards into the right carotid, but none into the commencement of the subclavian. The vertebral artery, the thyroid, the internal mammary, and the transverse cervical, were all pervious without any coagula. The aneurismal tumor is collapsed, and full of coagula, as also is the subclavian, beyond it.

In concluding the history of this case we may add, that Professor Lizars is now inclined to believe, that a plan of operation more likely to succeed in a similar case would be first to tie the subclavian just at its origin from the innominata, and then to tie the carotid about an inch above its origin, with the view of allowing the formation of an internal coagulum.

ANIMAL MAGNETISM.

[Communicated for the Boston Medical and Surgical Journal.]

THE evidence in favor of Animal Magnetism accumulates on all hands. Events, which have lately transpired in a neighboring city, leave to Ridicule no excuse to amuse herself with facts, which reason cannot comprehend. The question is now, not how to change the laws which govern human belief, but to show how these surprising phenomena do not contravene anything heretofore known of the functions of the brain and nervous system ;—a necessity the more imperious, since, if the obsolete notions that the soul leaves the body and wanders through the earth, as in the Stygian shades, be revived, as there is reason to fear from the tenor of some articles in the periodical press, it is impossible to foresee what may be the consequences, even in this enlightened age, to the very constitution of civil society.

With the hope of removing the grounds of such an assumption, and, in some degree, of obviating other difficulties connected with this subject, the subjoined observations are offered. Whoever is disposed to examine them attentively, though he may think that a simpler and less abstruse

method might be taken to account for the phenomena, will admit, it is believed, both that the conclusion follows directly from the premises, while the premises are the least exceptionable of any that can be adopted.

Supposing the nervous system to be the chief medium of a subtle and elastic fluid, to which it maintains a relation analogous to that which obtains between glass or any transparent medium and light, regulating its vibrations, the white substance serving as a conductor, and the grey and white together serving as an excitor, when stimulated by the blood, all the phenomena of the mind, as external sensations, internal ideas, and volitions, may be as readily conceived to be attended with an undulatory motion in that fluid, as any other state of the brain. This ethereal fluid would then constitute the mind or soul, the brain being in all animals but the material condition necessary for its manifestation. The existence of such a fluid has been rendered almost certain by the experiments of physiologists. But I hope it will not be considered out of place to add here a few considerations, which appear to me new, and strongly confirmatory of the hypothesis.

When we observe the image formed upon the retina by an outward object, we are led to infer that the image, thus painted, has some connection with the impression produced on the mind; but the inversion of the image overturns the hypothesis. When we compare the eye of the eagle with the eye of man, in order to discover on what depends the superiority of vision of the first, we perceive no essential difference, except that its retina consists of a number of folds or lamella, giving it a great extent of surface, compared with man's. Nor can we imagine a reason for this structure, on the supposition of the image impressed on the retina being the cause of the sensation or perception of the outward object. But when we take into view the wonderful effects produced by the galvanic machine, owing simply to *extent of surface* (supposed to enable it to accumulate a great quantity of fluid), by supposing a similar fluid to accumulate on the retina, the harmony between the structure and function of the part is evident. One class of philosophers say that the mind is in proportion to the size of the brain; another, that it is in proportion to the number and depth of its convolutions. Both assertions coincide with the opinion that it corresponds with the extent of its superficies.*

It is an established fact, that the nervous chords of sensation and volition increase in size in proportion to the function they have to perform in different animals, and in different parts of the same animal. The brain, the organ of thought, is larger in man in proportion to the nerves that issue from it, than in any other animal. The optic nerve is the largest in the human body, and has the greatest number of filamentous threads. Man is the most thinking animal, and vision is the highest and most intellectual of the senses. Whatever sense is most acute, its nerve

* Some assert that the grey matter is the matrix or generator of the white; others, that it is the seat of the mind; but has not the attachment between the two its analogy in the copper and zinc plate of the galvanic battery? and may not the extent of the superficies be for the purpose of exciting a great amount of fluid?

is largest. Where muscular action is strongest, and oftenest called into exercise, there the muscular nerves are largest. Now a small nerve might transmit an idea, sensation, or volition, as well as a large one, for anything that we can see to the contrary; but when we see an electromagnet increase in power according to the number of wires that are wound round it (*fac similes* of nervous filaments), and are told by the natural philosopher that they serve to accumulate the fluid, the adaptation for a similar structure in the nerves, to transmit a similar fluid, is obvious.

Should we infer that this was the true function of the nervous tissue, our inference would be confirmed by the fact that the powers of the mind, of sensation, and muscular action, are strengthened by being tasked, as the strength of the magnet increases by having weights attached to it. This fluid may also vary in density, as well as quantity; or the number of particles within a given space may increase, as well as the extent of surface, giving rise to an accumulation of the fluid of the same density; and if so, the phenomena would correspond with the effects of what is called, in electricity and galvanism, increased intensity and increased quantity. What can be a more striking evidence of the circulation of a fluid which, if its existence were presumed, would be invisible, than the state of Somnambulism affords? Here, one set of nerves act with unwonted energy, while another are almost as inert as dead matter.

Believing, from such an accumulation of evidence, that we are justified in assuming this hypothesis as a ground work of reasoning, I would now proceed to show how far it is necessary to presuppose the existence of an analogous fluid without, and will first refer to the following paragraphs from Brewster's work on Optics.

"In the undulatory theory, an exceedingly thin and elastic medium, called ether, is supposed to fill all space, *and to occupy the intervals between the particles of all material bodies*. The ether must be so extremely rare as to present no appreciable resistance to the planetary bodies which move freely through it."

"The particles of this ether are, like those of air, capable of being put into vibrations by the agitation of the particles of matter, so that waves or vibrations can be propagated through it in all directions. Within refracting media it is less elastic than in vacuo, and its elasticity is less in proportion to the refractive power of the body."

"When any vibrations or undulations are propagated through this ether and reach the nerves of the retina, they excite the sensation of light, in the same manner as the sensation of sound is excited in the nerves of the ear by the undulations of the air."

"Differences of color are supposed to arise from differences in the frequency of the ethereal vibrations." * * * *

"The theory of undulations has made great progress in modern times, and derives such powerful support from an extensive class of phenomena, that it has been received by many of our most distinguished philosophers."

Every step made in the progress of science tends farther to generalize the laws which regulate the motions and affections of matter. Gravita-

tion, electricity, magnetism, light, heat, chemical attraction, have approximated so far towards unity, that it is easier to say in what they resemble each other, than to point out in what they differ. Laplace demands but a plastic ether to mould the nebulous matter, floating through space, into all the conditions which his Celestial Mechanics require for their application; while Lamarck and Sir Humphrey Davy, by a similar agency, people the earth with all the forms of animate and inanimate matter.

The number of undulations of an elastic medium, or of different elastic media impinging on each other, in a given time, increases in proportion to the density of the medium; in the same proportion, the extent of each undulation diminishes. If the undulations of a fluid in immediate contact with the retina, of which 37,640 occur in the space of an inch, and 458,000,000,000,000, occur in a second of time,* create the sensation of redness, the density of the undulating fluid without the eye may diminish indefinitely, so long as that within increases in the same ratio, and the same number of undulations be made by the one medium impinging on the other, and consequently the same sensation be excited. What is true of one, is true of all the other sensations.

Now if we suppose that ethereal fluid, which Newton thought the cause of gravitation, to be identical with that which Huygens thought the cause of light, it must act through opaque as well as transparent bodies; but as its density is less in opaque bodies, or its undulatory power weakened, the reason why it exhibits the phenomena of light in one case, and the phenomena of weight in another, would be, because the number of undulations in a given time were fewer in the latter, than in the former

* The following Table, given by Mr. Herschel, contains the principal data of the undulatory theory:—

Colors of the Spectrum.	Lengths of an Undulation in parts of an Inch in Air.	Number of Undulations in an Inch.	Number of Undulations in a Second.†
Extreme Red - - - -	0.0000266	37640	458,000,000,000,000
Red - - - - -	0.0000256	39180	477,000,000,000,000
Intermediate - - - -	0.0000246	40720	495,000,000,000,000
Orange - - - - -	0.0000240	41610	506,000,000,000,000
Intermediate - - - -	0.0000235	42510	517,000,000,000,000
Yellow - - - - -	0.0000227	44000	535,000,000,000,000
Intermediate - - - -	0.0000219	45600	555,000,000,000,000
Green - - - - -	0.0000211	47460	577,000,000,000,000
Intermediate - - - -	0.0000203	49320	600,000,000,000,000
Blue - - - - -	0.0000196	51110	622,000,000,000,000
Intermediate - - - -	0.0000189	52910	644,000,000,000,000
Indigo - - - - -	0.0000185	54070	658,000,000,000,000
Intermediate - - - -	0.0000181	55240	672,000,000,000,000
Violet - - - - -	0.0000174	57490	699,000,000,000,000
Extreme Violet - - -	0.0000167	59750	727,000,000,000,000

"From this Table," says Mr. Herschel, "we see that the sensibility of the eye is confined within much narrower limits than that of the ear; the ratio of the extreme vibrations being nearly 1.58:1, and therefore less than an octave, and about equal to a minor sixth. That man should be able to measure with certainty such minute portions of space and time, is not a little wonderful; for it may be observed, whatever theory of light we adopt, these periods and these spaces have a *real existence*, being in fact deduced by Newton from direct measurements, and involving nothing hypothetical but the names here given them."—*Brewster's Optics*, page 119.

† Taking the velocity of light at 192,000 miles per second.

instance. But admitting a fluid to occupy the interstices between the particles of the retina, or to cover its surface, on which the ether impinges in its vibrations, giving rise to a second series of vibrations on which the sensation immediately depends; if its density be increased (as we believe takes place in somnambulism), the number of vibrations, as we have seen, will be increased in the same ratio, and there is no inconsistency in supposing that the slow undulatory motion of gravitation without, may produce that precise number of vibrations within, which excites the sensation of redness, or any other sensation. Since, then, gravitation extends from Boston to Providence, with a power (like the law of illumination) inversely as the square of 40 miles, when it is asserted that a somnambulist in the latter place has the panorama of our city before her, and can direct her attention to any part she chooses, and describe it minutely, the fact may be explained by combining two theories, which, if not established, are at least regarded as the most plausible in physics and physiology, viz.: that which assigns light and gravitation to the undulations of a fluid pervading all space, and all matter, and that which supposes a similar fluid to circulate in the nervous system of animals. For by the nature of the fluid without, its undulatory power must be diminished, by diminished density, or, what has the same effect, by the irregular collocation of the particles of opaque matter, requiring, to produce the phenomena of light, that increased density and consequent vibratory power of the fluid within, which all the appearances in the state of somnambulism compel us to believe actually exist. It does violence to no established law, but to our preconceived notions. And it is necessary that either our preconceived notions should give way, or a mass of evidence be rejected, the most positive and authentic in kind, and constantly accumulating in degree.

It should be borne in mind, that animal magnetism is not the only subject that is inexplicable on the common notions of the animal economy. An extensive variety of facts, linked together under the terms of sympathy, of fascination, of antipathy, of irritation and counter-irritation, concerning which there is little or no doubt of their authenticity, point to the nervous system as the source of some unrevealed mode of affection. Nor should hereditary predisposition be overlooked in this connection; nor even the question of embryotic influences, against which the only substantial argument is our own ideas how Nature ought to demean herself in our presence, rather than the careful and humble observation of what she does. These words are but general terms, and, like the term inflammation, are expressive of something that lies deeper. As they are now used, they convey no more real knowledge than do the names of the genera of plants, of their properties. If we could forget these terms, when reasoning about the conditions to which they refer, and imagine the nervous chords to circulate a fluid, for which their structure is as strikingly adapted as the vascular to circulate blood, we could lose nothing of what we already know, and might, *possibly*, learn something additional.

Will the adoption of the electro-galvanic fluid explain these mysteries? To assert that it will, unerringly and immediately, would perhaps have no other effect than to expose one to ridicule. The reasoning on which

such an hypothesis must rest, is very complex in its nature. Facts are abundant, but their relations are intricate. Every argument must be grounded, not on certainty, but on the greater probability. And at first, it will be next to impossible to make due allowance for disturbing causes. Still, an approximation may be made towards estimating its bearing on most, if not all, of the functions of the animal economy. The heterogeneous mass of facts, which physiological experiments, as well as pathology, have of late years brought to light, can be simplified and reduced to some sort of order, if not actually reconciled, by this view. At present, they are a "*caput mortuum*," serving no other purpose than to perplex and disgust the student. Nor is he taught to regard them with a clearer or more favorable eye, by the disputes and not unfrequent recriminations of different professors of the healing art, even in the same college. What can afford greater evidence of the want of a more comprehensive hypothesis as a guide to their researches?

A great deal of ink has been shed to prove the danger of theory getting a-head of facts; but comparatively little, to exhibit the evil of facts getting a-head of theory. And if, by hasty generalization, Science sometimes gets along too fast, can she not, from want of it, creep at too slow a rate? Let the speculations about ghosts, hobgoblins, witchcraft, disembodied spirits, and devils at sixes and sevens, which somnambulism is calculated to revive, if its phenomena cannot be referred to natural laws, answer this question.

I cannot enlarge on these points. At some future time I may advance some reasons, why what is called the manipulatory process of magnetization is neither inconsistent with sound philosophy, nor without its analogy in other sciences. Before closing this communication, I would, however, add, that though what has been said above presupposes the fluid to exist in the nerves only, it is not necessarily confined to that part of the system. It exists in all the solids and fluids of the body, the nervous sustaining to the other tissues some such relation as the prime conductor to bodies around it, or as transparent to opaque bodies in optics,—a medium for greater density of fluid, and greater freedom of motion,—and the fluid itself may, like the cellular tissue, represent the image of the whole body: and oscillating from within outwards, and from without inwards (obeying, in these motions, the laws which in crystals regulate reflection, refraction, &c. producing so many interesting phenomena), may thus be the secondary agent, in the hands of the Creator, of the form of our bodies and bodily organs, as well as of the functions of the mind. On this hypothesis the equilibrium of fluids explains those experiments of Magendie, in which the crura of the cerebrum being cut, the animal moves forwards; the crura of the cerebellum, backwards; and the section of either one of them gives a tendency to a lateral motion. It may serve also to reconcile the views of Bell and Magendie on the one hand, and Bellingeri on the other, in regard to the function of the anterior and posterior columns of the spinal marrow. It accounts for the curvilinear course of the fibres of the brain, in the mutual action of counter-currents, and for the pons varolii, septum lucidum, fornix, mammillary eminences, the decussation of nerves; assigns a better reason for

the ganglion, or the posterior chord of the spinal nerves, than any hitherto given; and, taking the beautiful curves exhibited in crystals by polarized light as the analogical starting point, it tells why organized beings are rounded in form, instead of angular. In tetanus, palsy, catalepsy, and every variety of nervous disease, it will be found to go far towards explaining what heretofore has been considered inexplicable. Any one, at his leisure, can verify these statements. It is sufficient here to give them without tracing each individual fact to its relation with this hypothesis. But lest it might seem, at first view, that these are mere assertions, made without due examination, I will dwell for a moment on one, which, both on account of its intrinsic beauty and because it occurred to the writer as an after-thought, may be considered almost as a crucial experiment of the whole theory.

This fluid, it is supposed, by its undulations to and fro, and by its currents and counter-currents, moving through the particles of organized matter, and exerting an attraction or exciting movement among them, disposes them in the forms of our bodily organs. Now let us imagine, after the optic beds and corpora striata have been formed, two currents passing horizontally from the sides of the brain towards the centre, on the under surface of the corpus callosum; they would meet at the centre, and be deflected perpendicularly downward, in the direction of the septum lucidum. Meeting with a repulsive surface on the optic beds, the fluid would there accumulate for a moment, form the fornix, fringing its edge by its vacillations against a counter repelling fluid, with the fimbriated bodies, and be impelled, as it were, most easily in the direction of its four crura. Passing down its anterior crura, and falling perpendicularly upon another part of the fluid more dense, it would, by undulating upwards and downwards, make a cupped depression, which would serve as a mould for the mamillary eminences. An idea of this mould, one may have by blowing perpendicularly upon the surface of a fluid through a small orifice. In like manner the formation of the pineal gland, the infundibulum, the pons varolii, and the convolutions themselves, may be traced with almost mathematical certainty.

It is usual for the person who advances an hypothesis, to give his name in connection therewith. But as the publishing of my name would add nothing to the weight of the arguments which have been presented, I hope the withholding of it will not prevent their obtaining a hearing. A systematic form will be given to the views, which are here but indicated, as soon as time and circumstances permit. In the mean while, at the expense of being regarded as a visionary and enthusiast, I commit them to the candid consideration of the medical public, with a firm conviction that while the *art* of medicine progresses uniformly, but slowly, by a rational empiricism, the science itself will be revolutionized, and reconstructed on the basis of these hitherto disregarded phenomena: nay, more, that they will furnish a key to unlock the inmost recess of the labyrinth of nature, and unfold the richest field for scientific research that the mind of man has ever ventured to explore,—the one which is destined to lead him to a just estimate of his rank in the scale of being, and of his relations to all things around him, and which will enable him to unloose

the seals of the last Volume of the series of Natural Religion, and read therein that Himself and the Polypus, the Crystal and the Lily, the Earth and Chaos, the Stellar Heavens and the Nebulous Mass, are but links in one undivided chain of formation and causation, of which the different physical sciences are but the names of its integral parts.

D. H.

ABDOMINAL TUMORS, CREOSOTE, &c.

To the Editor of the Boston Medical and Surgical Journal.

DEAR SIR,—An article in your Journal relative to an operation performed by Dr. Hayward, in the instance of a large tumor “growing from the fascia of the recti muscles of the abdomen,” reminded me of a lady under my notice, who has suffered much from a large tumor of the same description, or of the same locality, but which has at present disappeared under the lancet. As the case of this lady has for some time been doubtful, and as she is not yet out of danger, it has given rise to much reflection and inquiry. She has, for a still longer period of time, experienced much inconvenience, though no great pain, from a tumor of a *sarcomatous* character, located on her neck, under the right division of the maxillary bone. The tumors were for a while thought to be similar in their nature, both presenting a peculiar hardness to the touch, but upon the disappearance of the one under the lancet, and from its discharges, and upon the continuance of the other unchanged, though under a powerful external application, it would seem that the tumors are not of the same nature. The one that has disappeared, owing to the nature of its discharges, would with difficulty be pronounced a proper meliceris tumor. There has been, in this instance, a peculiar discharge *ex ore*, as well as from the tumor externally. A conference was held with a very eminent surgeon in the neighborhood, who decided upon operating upon the tumor of the abdomen (if requested), provided it did not point *within the peritoneum*. An inquiry arises whether this is the only condition to be provided for in order to enter upon a safe operation for the removal of a tumor of this sort. The books inform us of but few operations in such cases, and no doubt they are always to be considered difficult and hazardous. This induces me to urge, or repeat the request made in your Journal, that some one, or rather Dr. Hayward himself, would favor the profession with a detail of the operation alluded to in your article. The lady above-mentioned is at this time extremely feeble and much emaciated, and fears are entertained that she may not survive so great a change in her system.

My confidence, dear sir, in *creosote*, is still unimpaired. As an external wash to an inflamed leg, it has of late superseded every other application. A worthy practitioner in my neighborhood, having been confined and prevented from practice, was induced to make trial of it in the form of an *alcoholic tincture*, and by keeping the bandage upon his leg moist with it. So far as I can judge, he has been truly elated with the effect, although he relies greatly upon the use of the bandage. For the

tooth ache, and as a *tooth wash*, I consider creosote a most invaluable article. As its name imports, it certainly has a tendency to destroy the tartar upon teeth, and also to make a desirable impression upon all fungous and unnatural excrescences. Whether it attacks the *nerve* of a tooth, in any peculiar way, so as to remove pain, is a point of inquiry. Some might allege that it *kills* the nerve, and more directly than anything else; but this is also a point of inquiry or experiment.

At my first settlement in this county (Stafford, Va.), I made up my mind to investigate, as far as possible, its botanical productions, with reference to medical science (an effort which I should be happy to see made in every county of the State); but my engagements have been such, that I have only been able to put down some general notes upon the subject. The *diseases*, also, peculiar to the county, I have wished to notice. I am more and more convinced of the importance of attending very closely to latitude and longitude, or what I will call *physico-medical localities*, in our country. Cases of *neuralgia* and *hysteria* are constantly occurring among us, of a peculiar stamp and character, and which evidently demand a peculiar treatment. A case of *neuralgia* lately occurred, which seemed to baffle the most judicious treatment which could be had. This was in the instance of a gentleman of wealth and high standing, who spared no expense, and who was for a while under the care of an eminent physician in Philadelphia, but all to little purpose. Much reliance at one time was placed upon strychnine, but that failed. Finally, after a severe attack of spasms, or *cramps*, he sunk under it. A softening or ramollissement of the brain is supposed to have existed, and the question arises, is there any remedy in such a case? Cases of *hysteria* occur, most of which, it is believed, will yield to the *spinal treatment*. A blister over the cervical vertebræ has been of essential service in removing a breast complaint, or stricture of the *mammæ*. *Cutaneous diseases*, in this region, are peculiar, and require appropriate treatment.

I close, at this time, with a little of Botany. *Apocynum*, or American ipecac., is quite common in this county, and "is found along fences and the borders of woods. The root is the part used. It is perennial, creeping, and brownish. It is a valuable emetic and hydragogue cathartic." *Sarsaparilla*, *snake-root*, and *May-apple*, though not abundant, may readily be obtained in this county. H. F.

Hartwood, Va., Sept. 12, 1837.

EFFERVESCENT DRAUGHT.

THE following agreeable form of administering iron in an effervescent draught, is given by the "Gazetta Eclettica di Verona."—

R. *Ferri sulphatis cristil.* ℥ij.

Sacchar. albi. ℥ij.

Ft. pulvis, et div. in chart. æqual, No. 12.

Sodæ bicarbonat. ℥ij.

Sacchar. albi. ℥ij.

Ft. p.—divide in chart. 12.

A paper of each substance is separately dissolved in half a glass of

water; the two fluids are then mixed, and the whole taken at the moment of effervescence. The chemical products are a carbonate of the protoxide of iron, sulphate of soda, and a small quantity of carbonate of soda.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, SEPTEMBER 20, 1837.

NEW THEORY.

WE recommend to the special consideration of our readers, the article occupying a large part of this day's Journal. Though its professed object is to explain the phenomena of clairvoyance in somnambulism, it is evident that the writer of it makes that singular affection but the occasion for the announcement of a theory, which, supposing organized beings to be situated between two mediums highly dense and elastic, and at the same time invisible, accounts for all the diversity of form as well as function they exhibit. The principle of life is, as he conceives, a species of polarity, which prevents the two fluids from uniting while it exists; and all the internal movements of the body, caused, first, by the disturbance of the equilibrium, serve to increase the preponderance of that within over that without, while its employment in the functional acts serves to dissipate it. The different periods of life constitute different grades of habitual positive excitement through the system at large, and death is the mere restoration of the equilibrium.

Whatever may be the fate of the theory, our personal knowledge of the writer enables us to predict that it will be sustained by a weight of argument and force of illustration which are seldom met with in the support of groundless hypotheses.

PRACTICAL INSTRUCTION IN ANIMAL MAGNETISM.*

ASIDE from any particular feelings of dislike or partiality for the subject of animal magnetism, candor obliges us to acknowledge that this compact manual is a very captivating production. There is a peculiar manifestation of honesty in the author, who writes what he considers to be substantially true, without any reference to the opinions of the world. Having no guile himself, he seems to be unwilling to believe that any one else can be influenced by bad motives. Fully aware of the ridicule to which the devotees of Mesmerism have been subjected, he shows no disposition to shun the criticisms of those who have endeavored, from the very beginning, to overthrow the labors of those who are toiling in this new field of philosophy.

What are we to know of animal magnetism, unless some exertion is made to become acquainted with the facts which are continually being presented? To be so thoroughly obstinate as neither to hear, see or read, is virtually closing our eyes against the admission of those few rays

* Practical Instruction in Animal Magnetism. By J. P. F. Deleuze, with notes by the translator, Thomas C. Hartshorn. Providence: B. Cranston & Co., 1837. pp. 36, duodecimo. Part I.

of light, which men of science and of the highest respectability are concentrating for our immediate benefit. The mere act of expressing a supreme contempt for the assertions of those who have witnessed, over and over again, in different countries, precisely the same phenomena in individuals who were the subjects of this newly-discovered power, will not overthrow it, till collusion and deep hypocrisy can be found to have been at the bottom of every case, both in the operator and patient.

The translator of this work has certainly presented the profession with an uncommonly well-digested treatise, enhanced in value by his own notes and the corroborative testimony of eminent physicians. There is an orderly arrangement perceivable in it, which gives character at once to the matter, however doubtful we may be in relation to the reality of the details.

When the second part is published, which cannot be deferred very long, we have it in view to enter into a more minute consideration of the probable value of animal magnetism, as an agent in the cure of diseases. It should not be forgotten that Mr. Hartshorn's biographical sketch of the life and services of Deleuze, is worth the price of the book.

Western Journal of the Medical and Physical Sciences.—How it happens that No. 41, due in July last, should have been one month and a half on the way from Cincinnati, is more than we can divine. But better late than never. Its contents speak well for the industry of the three editors, Drs. Drake, Harrison, and Gross. Article 1st, is called *hospital reports*, which are practically useful: a series of these observations would be read with renewed pleasure and advantage. Dr. Harrison's *clinical introductory* is another equally meritorious production. This periodical is deserving of an extensive patronage, which we trust it receives.

French Medical Professors.—In the department of medicine in the Royal College, there are twenty-six professors, and each receives from government, from two to eight thousand francs a year: the students are at no expense whatever for lectures. Usually there are about five thousand medical students in Paris. To be graduated in medicine, the candidate must have received, previously, the degree of Bachelor of Arts, and also have studied four entire years. At the termination of each year, there is a public examination. Dr. Parker, now in France, writes home to his friends in Cincinnati, that the professors vary considerably in their lecture-room attractions. For example, says Dr. P., "the amphitheatre will hold from fifteen to eighteen hundred. I have seen it, at the lecture of Dumeril or Broussais, with only fifty; while at Cruvelhier's, Andral's, Orfila's, or Margolin's, you will find the amphitheatre crowded to overflowing."

University of New York.—A writer in the Cincinnati Journal is down upon the regents for having suffered the College of Surgeons and Physicians to languish so long, when the chairs might have been well sustained. He says the true cause of its decay—for decayed it has—is owing entirely to the ignorance of the professors. By all appearances, the New York Medical School is in a fair way of becoming utterly extinct.

Medical Graduates in Harvard University.—The following are the medical graduates in Harvard University for the academic year, ending August, 1837.

Ezra Abbot, Jun., Dissertation on *Intermittent Fever*.
 George Atwood, *On the Skin*.
 Charles F. Barnard, A.B., *Apoplexy*.
 Henry Barnes, *Dyspepsia*.
 Gideon Forrester Barstow, A.B., *Tubercular Phthisis*.
 Elijah Whitney Carpenter, *Measles*.
 Benjamin Eddy Cotting, A.M., *Delirium Tremens*.
 Joseph Henry Dorr, Jun., A.M., *Pleurisy*.
 Hanover Dickey, Jun., *Reproduction*.
 Horace Dupee, Jun., A.M., *Cancer*.
 Hervey Wallace Eaton, A.B., *Bloodletting*.
 John Warren Gorham, A.M., *Pericarditis*.
 Stephen Madison Gale, *Acute Inflammation*.
 Clarendon Gorham Holbrook, *Treatment of Fever*.
 Thomas Phillips Jackson, *Ascites*.
 William Lebanon, *Animal Heat*.
 Simeon Palmer, Jun., *Asthma*.
 William P. Richardson, A.M., *Insanity*.
 Joseph Sargent, A.M., *Cicatrizization of Tuberculous Cavities in the*
 Alvan Smith, *Scarlatina*. [Lungs].
 Edward Spalding, A.B., *Diagnosis*.
 Hiram Bradbury Tebbetts, *Hemoptysis*.
 Charles Thacher, *Diseases of Bones*.
 Charles Eliot Ware, A.M., *Influence of Temperature on Mortality*.
 Henry Wheatland, A.M., *Natural History of Respiration*.
 Charles Henry Wheelwright, *Unimpregnated Uterus*.
 Caristopher Minot Weld, A.M., *On the Liver*.
 Lemuel Williams Washburn, A.M., *Typhus*.
 Jeffries Wyman, A.M., *On the Eye*.
 Morrill Wyman, A.M., *Ventilation of Hospitals*.
 Richard Sharpe Young, A.M., *Aneurism*.
 W. CHANNING, *Dean of the Faculty of Medicine*.

Medical Degrees.—At the late Commencement at Bowdoin College, the degree of M.D. was conferred on 33 young gentlemen. The honorary degree was conferred on Levi J. Ham, of Newfield, Me.

TO CORRESPONDENTS, &c.—The communication on the *itch insect*, promised for the present No. of the Journal, was not received in season to be inserted this week.

Gentlemen having books belonging to the Editor of the Medical Journal, are earnestly requested to return them forthwith to the Journal Office, corner of Washington and Franklin Streets.

We shall be very happy to accommodate "H. F." with regard to the payment of his subscription, in the manner proposed in his letter.

DIED.—Near Rodney, Mi., Dr. Rush Nutt, aged 57.—At South Reading, Mass., Dr. Nathan Richardson, aged 56.

Whole number of deaths in Boston, for the week ending Sept. 16, 50. Males, 25—Females, 25.
 Cholera infantum, 2—teething, 1—accidental, 1—fits, 1—chronic diarrhoea, 2—cholera morbus, 3—
 angina pectoris, 1—disease of the heart, 1—canker, 1—child bed fever, 2—inflammation, 1—rupture
 of the liver, 1—spasms, 1—consumption, 4—hooping cough, 1—infantile, 2—dysentery, 1—dropsy on
 the brain, 2—disease of the head, 1—dropsy in the head, 1—typhus fever, 1—tuberculous enteritis, 1.

BOYLSTON MEDICAL PRIZE QUESTIONS.

The Boylston Medical Committee, appointed by the President and Fellows of Harvard University, consists of the following physicians, viz. :

JOHN C. WARREN, M.D. GEORGE C. SHATTUCK, M.D. GEORGE HAYWARD, M.D.
RUFUS WYMAN, M.D. JACOB BIGELOW, M.D. ENOCH HALE, M.D.
JOHN RANDALL, M.D. WALTER CHANNING, M.D. JOHN WARR, M.D.

At the annual meeting of the Committee on Wednesday, August 2, 1837, a premium of fifty dollars, or a gold medal of that value, was awarded to OLIVER WENDELL HOLMES, M.D. of Boston, for a dissertation on the question, "What is the nature of Neuralgia, and what is the best mode of treating it?" A similar premium, of the same value, was at the same time awarded to Dr. Holmes for a dissertation on the question, "To what extent, and in what places, has intermittent fever been indigenous in New England?"

The following Prize Questions for the year 1838 are before the public, viz. :

1st. "What are the anatomical characters of Typhous Fever, and what is the best mode of treating this disease?"

2d. "What are the causes, seat, and proper treatment of Erysipelatous Inflammation? (*Erysipelas Erysipelatousum* of Good.)"

Dissertations on these subjects must be transmitted, post-paid, to John C. Warren, M.D. Boston, on or before the first Wednesday of April, 1838.

The following questions are now offered for the year 1839, viz. :

1st. "The pathology and treatment of Rheumatism."

2d. "What is Scrofula? and what is its best mode of treatment?"

Dissertations on these subjects must be transmitted, as above, on or before the first Wednesday of April, 1839.

The author of the successful dissertation on either of the above subjects, will be entitled to fifty dollars, or a gold medal of that value, at his option.

Each dissertation must be accompanied by a sealed packet, on which shall be written some device or sentence, and within shall be enclosed the author's name and place of residence. The same device or sentence is to be written on the dissertation to which the packet is attached.

All unsuccessful dissertations are deposited with the Secretary, from whom they may be obtained, if called for within one year after they have been received.

By an order adopted in the year 1836, the Secretary was directed to publish annually the following votes, viz. :

1st. That the Board do not consider themselves as approving the doctrines contained in any of the dissertations to which the premiums may be adjudged.

2d. That in case of the publication of a successful dissertation, the author be considered as bound to print the above vote in connection therewith.

Boston, August 3, 1837.

A9—4t

ENOCH HALE, Secretary.

Publishers of newspapers and medical journals throughout the United States, are respectfully requested to give the above an insertion.

MEDICAL INSTRUCTION.

THE subscribers have associated for the purpose of giving medical instruction. A convenient room has been provided for this purpose, which will be open to the students at all hours. They will have access to an extensive medical library, and every other necessary facility for the acquirement of a thorough medical education.

Opportunities will be offered for the observation of diseases and their treatment in two Dispensary districts, embracing Wards 1, 2 and 3, and in cases which will be treated at the room daily.

Instruction will be given by clinical and other lectures, and by examinations at least twice a week. Sufficient attention will be paid to Practical Anatomy.

For further information, application may be made at the room, over 103 Hanover street, or to the subscribers.

EPHRAIM BUCK, M.D.
ASA B. SNOW, M.D.
E. WALTER LEACH, M.D.
HENRY G. CLARK, M.D.
JOSEPH MORIARTY, M.D.

Boston, August 9, 1837.

MASSACHUSETTS MEDICAL SOCIETY.—COUNSELLORS' MEETING.

A STATED Meeting of the Counsellors of the Massachusetts Medical Society will be held at the Society's Room, Athenaeum Building, Pearl Street, on WEDNESDAY, 4th of October next, at 11 o'clock, A. M.

Sept. 29—1m.

JOHN HOMANS, Rec. Sec'y.

MEDICAL INSTITUTION OF YALE COLLEGE.

THE course of Medical Instruction in Yale College begins on Thursday, Nov. 2d, 1837, and it continues seventeen weeks. The several branches are taught as follows, viz. :

Principles and Practice of Surgery, by	- - -	THOMAS HUBBARD, M.D.
Theory and Practice of Medicine, by	- - -	ELI IVES, M.D.
Chemistry and Pharmacy, by	- - -	BENJAMIN SILLIMAN, M.D. and LL. D.
Materia Medica and Therapeutics, by	- - -	WILLIAM TULLY, M.D.
Anatomy and Physiology, by	- - -	JONATHAN KNIGHT, M.D.
Obstetrics, by	- - -	TIMOTHY P. BEERS, M.D.

The matriculation fee and contingent bill are \$7.50; the fees for Chemistry, Anatomy, Surgery, Materia Medica, and Theory and Practice, are \$12.50 each; and for Obstetrics, \$6—amounting to \$76—the whole to be paid in advance. The graduation fee is \$15.
Yale College, Sept. 1, 1837.

Sept. 13—6t

THE BOSTON MEDICAL AND SURGICAL JOURNAL is published every Wednesday, by D. CLAPP, JR. at 184 Washington Street, corner of Franklin Street, to whom all communications must be addressed, post-paid. It is also published in Monthly Parts, each Part containing the weekly numbers of the preceding month, stitched in a cover. J. V. C. SMITH, M.D. Editor.—Price \$2.00 a year in advance, \$3.50 after three months, and \$4.00 if not paid within the year.—Agents allowed every seventh copy gratis.—Orders from a distance must be accompanied by payment in advance, or satisfactory reference.—Postage the same as for a Newspaper.